SUPPLY CHAIN ANALYTICS

APQC Supply Chain Management Research Overview

TOPIC OVERVIEW AND SCOPE

As organizations' supply chains become increasingly complex and leverage more data, the role of analytics in the planning process is becoming a necessity. Data has been called "the new oil" as it is a source of power to organizations that can process it. But in its raw state, it adds no value.

The challenge is that 90 percent of the world's data was generated within the last 24 months, and 80 percent of it is unsearchable—and, as result, virtually non-useable, as highlighted by speakers at the April 2019 NextGen Supply Chain Conference. Much of that data exists in silos or involves external business partners. Ron Castro of IBM has said, "The question becomes: How do we make sense of all of that data and make it actionable?"

To accomplish this goal, supply chain leaders are turning to big data and advanced analytics to help make business decisions. An April 2019 APQC quick poll found that 69 percent of respondents have seen an increase in their organizational investment in advanced analytics over the past three years. Increasingly powered by new and emerging technologies including artificial intelligence and machine learning, supply chain analytics fall into five categories: descriptive, diagnostic, predictive, prescriptive, and cognitive analytics.

- Descriptive - what is happening/has happened
- Diagnostic - why it's happening
- Predictive - what will happen
- Prescriptive - what should be done
- Cognitive - uses machine learning to tell what should or could be done

This research project will seek to gather insights into which types of analytics are used in which parts of the supply chain, how the efforts are structured and funded, the relative maturity of respondent organizations, the business challenges analytics is helping solve, and how organizations are measuring the performance of their supply chain analytics.

To conduct this research project on supply chain analytics, APQC's supply chain research team is partnering with senior statistician Andrea Stroud and process and performance management principal research lead Holly Lyke-Ho-Gland.

AUDIENCE

- Supply chain managers and leaders
- Supply chain planning managers and leaders
- Supply chain analytics leaders and other leaders responsible for analytics

POTENTIAL RESEARCH QUESTIONS

♦ Which types of analytics are used in which parts of the supply chain?
♦ How are supply chain analytics efforts structured and funded?
♦ How mature are respondent organizations in their analytics practices?
♦ What business challenges does analytics help solve?
♦ How are organizations measuring the performance of their supply chain analytics?

RESEARCH APPROACH AND DELIVERABLES

This fundable project will have two main workstreams.

1. Survey research: Phone-based survey on supply chain analytics—global data collection and analysis.
2. Case study research: APQC will conduct interviews to create case studies on successful organizations.

Primary planned deliverables include:

♦ Survey summary report – This report will focus on insights from the data collected.
♦ White paper and overview – This paper will cover the findings and implications of the survey results. The brief overview will summarize the findings.
♦ Case studies – Each case study will focus on one organization's practices.
♦ Presentation on the results – This presentation will include slides and a recorded webinar on the results.
♦ Infographic – This deliverable will be a visual look at selected findings.

ABOUT APQC

APQC helps organizations work smarter, faster, and with greater confidence. It is the world's foremost authority in benchmarking, best practices, process and performance improvement, and knowledge management. APQC's unique structure as a member-based nonprofit makes it a differentiator in the marketplace. APQC partners with more than 500 member organizations worldwide in all industries. With more than 40 years of experience, APQC remains the world's leader in transforming organizations. Visit us at www.apqc.org, and learn how you can make best practices your practices.